

FACTORS THAT AFFECT BRAND LOYALTY AND CUSTOMER ADVOCACY: THE MODERATING ROLE OF GREENWASHING

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ABSTRACT

This study aims to determine and analyze the influence of green perceived value and altruistic value on customer engagement behavior, the influence of customer engagement behavior on brand loyalty and customer advocacy, test the role of mediation between green perceived value and altruistic value on brand loyalty and test the role of moderation greenwashing perception between green perceived value and altruistic value towards brand loyalty. The data collection technique method uses nonprobability sampling with a purposive sampling method. The data was collected directly from a sample that had adjusted the criteria and disseminated through a questionnaire to 120 respondents using a Likert scale of 1-5 where 1 indicated strong disapproval, while 5 indicated strongly agreed. The statements in this study consist of 20 statements obtained from six variables, namely the variables green perceived value, altruistic value, brand loyalty, customer advocacy, customer engagement behavior, and greenwashing perception. The questionnaire was distributed through a google form to respondents who had consumed Aqua and Le Minerale bottled drinking water (AMDK). The analysis method used in this study is the Structural Equation Model (SEM). The results showed that green perceived value has a positive effect on customer engagement behavior, altruistic value has a positive effect on customer engagement behavior, customer engagement behavior has a positive effect on brand loyalty, customer engagement behavior has a positive effect on customer advocacy, Customer Engagement Behavior Mediates the Influence Between Green Perceived Value on Brand Loyalty, Customer Engagement Behavior Mediates the Influence Between Altruistic Value and Brand Loyalty, Greenwashing Perception Moderates the Influence of Green Perceived Value on Brand Loyalty and Greenwashing Perception Results moderating the influence of altruistic values on brand loyalty.

Keywords: green perceived value, altruistic value, brand loyalty, customer advocacy, customer engagement behavior, greenwashing perception

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INTRODUCTION

Indonesia is the country with the 4th largest population in the world. Based on data from the Directorate General of Population and Civil Registration of the Ministry of Home Affairs of the Republic of Indonesia in 2021, which is 272,229,372 people. The high population of Indonesia makes Indonesia a country with a high level of consumption. Based on statistical data the level of consumption in Indonesia increased by 3.17% from 2020, based on the details of expenditure items, 2021 the Indonesian population spent an average of IDR 622.8 thousand per month on food consumption, then IDR 641.7 thousand for non-food consumption, while based on the area of residence, the consumption expenditure of residents in urban areas was IDR 1.48 million per month and for residents in rural areas the consumption value was only born at an average of IDR 971.4 thousand per month (Vika Azkiya Dihni, 2022).

The high level of consumption and the large number of types of products from various kinds of raw materials in Indonesia will certainly have the potential to produce high waste, this is proven to put Indonesia in second place as the country with the largest plastic pollution in the world after China (Pentingnya Pengolahan Sampah Plastik Di Indonesia, 2021).

Coronation as a country with plastic waste pollution is not only caused by industry players who use plastic as their product packaging, the high waste in Indonesia is also caused by the lack of attention and enthusiasm of the public towards environmentally friendly products. Plastic waste generated by product wrap waste such as plastic bags and plastic bottles can cause damage to ecological and socioeconomic sustainability (Leckie et al., 2021).

It is known that statistical data in 2021 explains that plastic waste in Indonesia has a total of 64 million tons per year, this amount consists of 3.2 million tons of waste that is collected from plastic polluted into the waters and plastic waste that is polluted the community environment amounting to 10 M pieces every year or as many as 85 tons of plastic bags (Pentingnya Pengolahan Sampah Plastik di Indonesia, 2021).

Based on *Word Bank* data in 2020, shows that major cities in the world are producers and pollutants of plastic waste, namely 1.3 billion tons per year, the amount of waste in 2025 is also still predicted to continue to grow to 2.2 billion tons (Fajar Pebrianto, 2019).

In recent decades there has been an increase in public concern regarding environmental damage (Abdelhadi et al., 2014). Products that are not environmentally friendly will produce waste that is harmful to ecological sustainability because the product waste cannot be recycled or waste that is difficult to decompose so it will have an impact on environmental damage and consumer health, this encourages consumers to switch to environmentally friendly and recyclable or environmentally friendly products, other studies show consumers who know about the environment affect interest and purchasing behavior of environmentally friendly brands (H. Li et al., 2020). So companies need to change their mindset and marketing strategy by producing environmentally friendly products in order to create a good perception of value in society. Consumer behavior towards business has changed. Consumers show a greater willingness to adopt sustainable consumption behaviors (Leckie et al., 2018), consumers have realized the environmental damage caused by the impact of business activities should be a serious concern so that companies can no longer sit on the sidelines of the environmental impacts that have been caused by their business activities or ignore the major changes in the behavior of people who have realized a lot of concern for the environment.

However, in the midst of consumer concern for environmentally friendly products. Consumer expectations are often undermined by the perception of *greenwashing*, where consumers feel that companies' claims about the environmental functioning of their products are unprovable (D. Li et al., 2012). The perception of *greenwashing* will increase consumer skepticism and perceived risks about green products or eco-friendly brands as well as the attributes of green products. Academic researchers have called on governments and organizations to provide more accurate and transparent information to increase the perceived trust and value of eco-friendly products and services among consumers (Leckie et al., 2021).

Seeing the phenomenon of public awareness of environmentally friendly products, the company realizes this as a challenge to innovate its marketing form and produce environmentally friendly brands to be more accepted by the public. In 2019 at least five Indonesian companies have achieved *Corporation* certification by the global non-profit organization B Lab from the United States, the certification is given to 5 (five) companies because they are considered to have high standards in their companies, this certification is carried out as a form of appreciation to individuals and companies because they are considered to pay attention to the impact on the surrounding community. The high-standard assessments

conducted by B Lab to companies are public transparency, accountability, social performance/corporate social goals, and verified environmental aspects. The companies receiving certification from B Lab are the Aqua brand of bottled drinking water (AMDK), Beachgold brand, Mycotech brand, Innate Motion brand, and Indosole brand (Fajar Pebrianto, 2019).

A large number of bottled water products (AMDK) industries in Indonesia adds to the large list of brands in the bottled water (AMDK) industry, making it a challenge for companies to win the hearts of consumers. Based on the *Top Brand Award*, lists the five (5) be best bottled water products in 2022:

Table of Best Quality in Bottled Water Categories in 2022

BRAND	TBI 2022
Bottled water	57.2%
Le Minerale	12.5%
Ades	6.4b%
Cleo	4.2%
Club	3.8%

Source: (Amjad, 2021) JPPN.com(Amjad, 2021)

Based on the results of the Katadata Insight Center (KIC) 2021 survey, which was conducted on the *Sustainability Action for the Future Economy* (SAFE) agenda in 2021, bottled drinking water products (AMDK) released that Aqua as an environmentally friendly product and the most remembered by the public, in the perception of being environmentally friendly even in this case Aqua's score far beats its competitor brands such as Le Minerale and Ades. In its release, the Katadata Insight Center (KIC) also showed that 20.3% of consumers pay attention to the environmental impact of society and health, one of the consumer factors in their decision to buy products, in the results of its survey KIC there are also 62.9% of consumers who have bought environmentally friendly products, and 60.5% for the reason that they want to preserve the environment while as many as 51.1% because they feel like and are satisfied when using environmentally friendly brands (Amjad, 2021).

Aqua's commitment in the problem of plastic waste or in contributing to protecting the environment is evidenced by the launch of the Aqua Life program, a bottle packaging innovation that uses packaging made from recycling which began to be launched in Bali in 2018 and in Jakarta in 2019, the *Aqua Life* program or the use of recycled plastic bottle packaging elements up to 25%. The recycled plastic content element will continue to be increased to 50% of the recycled material content, even *Aqua* targets to use 100% of its product bottle packaging from recycled materials by 2025.

The commitment to protecting the environment in the world of bottled drinking water (AMDK) industry was also launched by the bottled drinking water brand Le Minerale which also claims that its products are environmentally friendly brands, this is explained through its advertisement which calls disposable gallons "more hygienic and practical" Le Minerale also claims that its brand is a 100% *eco recyclable* product and free from harmful PBA, with PET-based packaging, Le Minerale also collaborates with the Indonesian Plastic Recycling

Association (ADUPI) and the Indonesian Waste Pickers Association (IPI) in order to encourage the circular economy movement and as a form of its brand responsible for the environment (Yohana Artha Uly, 2021).

Plastic bottles are a tool for packaging mineral drinking water or ready-to-eat drinks that are widely used by business actors besides being cheap, which is considered to give a practical impression. But it also has a harmful impact on the environment and the sustainability of nature, this is because plastic waste is a waste that is difficult to decompose, which means that it takes up to 450 years to decompose properly, not only that the impact of plastic waste can also have a bad impact on soil, water, sea, and air (Nur Hadi, 2020).

Aqua and Le Minerale are bottled drinking water (AMDK) brands that have a high level of popularity and are mostly consumed by the Indonesian people. However, it's packaging products that are claimed to be environmentally friendly, namely Aqua life and Le Minerale Eko 100% *recyclable bottle* are relatively new environmentally friendly brand programs. Aqua and Le Minerale must try to create *customer engagement* so that consumers are willing to be loyal to Aqua and Le Minerale and are willing to do *advocacy*, as well as the more an environmentally friendly product provides *green perceive* value and *altruistic value*, the more loyal consumers will be. The result of research conducted by (Leckie et al., 2018), is that the more an environmentally friendly product provides *Green perceived value* and *Altruistic values*, the customer engagement (CE) for an environmentally friendly brand will be higher and the higher *the customer engagement* (CE), the more loyal consumers will be and consumers will *advocate*.

Green marketing is a strategy in which there is the development of all marketing activities in increasing consumer loyalty (Amin et al., 2014), this is a strategy that most consumers expect about environmentally friendly brands as a way to market and increases consumer loyalty.

Green marketing strategy includes several things such as:

- a. Production
- b. Price
- c. Promotion
- d. Distribution

In determining an environmental-based marketing strategy, it is necessary to look at the factors that affect *brand loyalty* and *customer advocacy* in environmentally friendly brands. According to Leckie et al (2021), there are several factors that affect *brand loyalty* (*brand loyalty*) and *advocacy* factors are *green perceived value* variables, *altruistic values* variables, and *customer engagement behavior* variables.

Worsening environmental damage caused by products that are not environmentally friendly so as to produce waste that causes damage to the environment such as polluting the air, water, and soil, thus making consumers aware of the importance of caring for the environment by consuming environmentally friendly products, this also makes marketers or companies have to be able to adapt to produce environmentally friendly products in order to be able to create *brand loyalty* and *advocacy* on its products through *customer engagement behavior* (CEB).

The purpose of this study is to find out the effect of *green perceived value* on *customer engagement behavior*. To find out the effect of *altruistic values* on *customer engagement*

behavior. To find out the influence of *customer engagement behavior* on *brand loyalty*. The benefit of this research is that this research is expected to be an information and basis for companies in determining marketing strategies and decision-making related to *brand loyalty* and *advocacy* through *customer engagement behavior* (CEB) in strengthening the position of environmentally friendly products in the community. This research is also expected to increase knowledge for academics in the community in encouraging environmentally friendly products and in order to maintain the environmental sustainability.

METHOD

The design used in this study is *hypothesis testing* (*Hypothesis Testing*) (Sugiharto, 2017), aimed at testing the influence of green perceived value and altruistic values on customer engagement and how the influence of *customer engagement* in mediating the relationship between *green perceived value*, *altruistic values*, and *brand loyalty* and to test the influence of *greenwashing perception* in moderating the influence of *green perceived value*, *altruistic values* on *brand loyalty*. The design of this study consists of several components, namely the *research strategy* used is a survey that uses a *google form* and is given to respondents and does not involve researchers in the survey. Furthermore, this research is a field study (*non-contrived*), namely a field study by providing questionnaires to respondents, an analysis used by consumers who have used or consumed environmentally friendly brands, namely bottled drinking water (AMDK) Aqua and Le Minerale with a *cross-sectional* data collection time which means that the data is taken once (Sekaran & Bougie, 2016a).

Variables and Measurements

In this study, 6 (six) variables were used, namely *green perceived value*, *altruistic values*, *environmental identity*, *customer engagement behavior*, *brand loyalty*, *customer advocacy*, and *Greenwashing*. This study uses statement items as a measuring tool of the above variables and uses the *Likert* scale technique of 1 to 5 for measurements, namely 1 = Strongly Disagree, 2 = Disagree, 3 = Agree Enough, 4 = Agree and 5 = Strongly Agree. Then this is a statement item to measure the measured variables.

- *Green Perceived Value (GPV)*
- *Altruistic Value (AV)*
- *Customer Engagement Behavior (CEB)*
- *Brand Loyalty (BL)*
- *Customer Advocacy (CA)*
- *Greenwashing (GW)*

Data Collection Methods

Data collection in this study used primary data, where data was obtained which was obtained directly by the researcher without going through an intermediary. In the collection technique, researchers use google forms digitally, where the data is questionnaire data that contains statements from indicators of research variables.

Sampling Methods

The method for sample collection carried out by researchers is non-probability sampling, which is a procedure that means that all respondents cannot be given the same opportunity. The withdrawal technique carried out by the researcher is purposive sampling, namely by sampling technique by previously establishing criteria for the sample studied (Sekaran & Bougie,

2016b). Respondents who can be used as samples are consumers who consume environmentally friendly brand products, namely bottled drinking water (AMDK) Aqua and Le Minerale. The number of samples required by researchers is 5 to 10 times the number of indicators (Da Silveira et al., 2019).

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistical testing aims to provide an overview of a variable used in research. The main parameters used in descriptive statistical testing are the values of the mean and standard deviation of each variable indicator. The *mean* value is the overall average value of the respondent against a variable under study and is used to describe the average value of the results of the variable indicator. Standard deviation describes the magnitude of the variation of the respondent's overall answer.

The following is the result of descriptive statistical calculations of each variable described through the average value and standard deviation in each variable indicator.

Green Perceived Value

Descriptive statistics of the *Green Perceived Value* variable can be seen in Table 4.1 below:

Table 4.1
Green Perceived Value Descriptive Statistics

<i>Green Perceived Value</i>	N	Mean	Std. Deviation
The brand has contributed to the environment by producing recycled packaging	120	4.28	0.81
This brand has more environmental benefits than other brands.	120	4.17	0.83
This brand is more environmentally friendly than other brands	120	4.09	0.84
Average value	120	4.18	0.83

Source: Data processed using SPSS (attached)

Based on the results of the descriptive statistics above, the respondent's answer to the *green perceived value* variable above has a *mean* or average value of 4.18. Based on the value of the mean, it can be seen that almost all respondents feel that this brand has contributed to the environment by producing recycled packaging. Based on the standard deviation value, it shows that respondents' answers to this indicator are quite variable.

This variable is composed of 3 indicators, where the first indicator has a *mean* value of 4.28. This value shows that in this indicator, the average respondent states that this brand has contributed to the environment by producing recycled packaging. In the second indicator shows a mean value of 4.17. The average value shows that this brand has more environmental benefits than other brands. The third indicator shows a mean value of 4.18 where the value also still shows that in general respondents feel that this brand is more environmentally friendly than other brands.

Altruistic Value

Descriptive statistics of the *Altruistic Value* variable can be seen in Table 4.2 below:

Table 4.2
Descriptive Statistics of Altruistic Value

<i>Altruistic Value</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
I think plastic waste harms many people in the world	120	4.49	0.80
The effects of plastic waste on public health are worse than we realize.	120	4.55	0.73
Environmental protection will help people have a better quality of life.	120	4.57	0.77
Average value	120	4.54	0.77

Source: Data processed using SPSS (attached)

Based on the results of descriptive statistics above, respondents' answers to the *altruistic* value variable above have a *mean* or average value of 4.54. Based on the value of the mean, it can be seen that almost all respondents feel that the effect of environmental protection will help people have a better quality of life. Based on the standard deviation value, it shows that respondents' answers to this indicator are quite variable.

This variable is composed of 3 indicators, where the first indicator has a *mean* value of 4.49. This value shows that in this indicator the average respondent states that plastic waste harms many people in the world. In the second indicator shows a mean value of 4.55. The average value suggests the effect of plastic waste on public health is worse than we realize. The third indicator shows a mean value of 4.57 where the value also still shows that in general respondents feel that environmental protection will help people have a better quality of life.

Customer Engagement Behavior

Descriptive statistics of *customer engagement behavior* variables can be seen in Table 4.3 below:

Table 4.3
Descriptive Statistics of Customer Engagement Behavior

<i>Customer Engagement Behavior</i>	<i>N</i>	<i>Mean</i>	<i>Std. Deviation</i>
I say positive things about this brand to others.	120	3.95	0.90
I encourage friends and relatives to buy and use this brand.	120	3.75	0.97
I recommend this brand to someone who asks me for advice.	120	3.85	0.96
Average value	120	3.85	0.94

Source: Data processed using SPSS (attached)

Based on the results of the descriptive statistics above, respondents' answers to the *customer engagement behavior* variable above have a *mean* or average value of 3.85. Based on the value of the mean, it can be seen that almost all respondents say positive things about this brand to others. Based on the standard deviation value, it shows that respondents' answers to this indicator are quite variable.

This variable is composed of 3 indicators, where the first indicator has a *mean* value of 3.95. This value shows that in this indicator, the average respondent stated that they would say positive things about this brand to others. The second indicator shows a mean value of 3.75. The average value shows that consumers encourage friends and relatives to buy and use this brand. The third indicator shows a mean value of 3.85 where the value also still shows that in general consumers recommend this brand to someone who asks for advice.

Brand Loyalty

Descriptive statistics of *the brand loyalty* variables can be seen in Table 4.4 below:

Table 4.4
Descriptive Brand Loyalty Statistics

<i>Brand Loyalty</i>	<i>N</i>	<i>Me an</i>	<i>Std. Deviation</i>
Compared to other brands, this is the only brand I will buy.	12 0	3.6 5	0.96
If this brand is not available, I will postpone the purchase.	12 0	3.1 2	1.24
I will still buy this brand, not any other brand	12 0	3.4 7	1.09
Average value	12 0	3.4 1	1.10

Source: Data processed using SPSS (attached)

Based on the results of the descriptive statistics above, respondents' answers to the *brand loyalty* variable above have a *mean* or average value of 3.41. Based on the value of the mean, it can be seen that almost all respondents feel that compared to other brands, this is the only brand they will buy. Based on the standard deviation value, it shows that respondents' answers to this indicator are quite variable.

This variable is composed of 3 indicators, where the first indicator has a *mean* value of 3.65. This value shows that in this indicator, the average respondent says positive things about this brand to others. The second indicator shows a mean value of 3.15. The average value indicates that if this brand is not available, the respondent will postpone the purchase. The third indicator shows a mean value of 3.41 where the value also still shows that in general respondents will continue to buy the brand, not other brands.

Customer Advocacy

Descriptive statistics of the customer advocacy variables can be seen in Table 4.5 below:

Table 4.5
Descriptive Customer Advocacy Statistics

<i>Customer Advocacy</i>	N	Mean	Std. Deviation
I would recommend this brand to my friends and family	120	3.86	0.86
when the opportunity presents I will explain the positive aspects of this brand	120	3.68	0.87
When I hear people criticize the brand, I try to defend it	120	3.55	0.94
I want my family and friends to use an eco-friendly brand	120	4.20	0.76
Average value	120	3.82	0.86

Source: Data processed using SPSS (attached)

Based on the results of the descriptive statistics above, respondents' answers to the customer advocacy variables above have a mean or average value of 3.82. Based on the value of the mean, it can be seen that almost all respondents will recommend this brand to friends and family. Based on the standard deviation value, it shows that respondents' answers to this indicator are quite variable.

This variable is composed of 4 indicators, where the first indicator has a mean value of 3.86. This value shows that in this indicator, the average respondent will recommend this brand to friends and family. The second indicator shows a mean value of 3.69. The average value shows when there is an opportunity for respondents to explain the positive aspects of this brand. The third indicator shows a mean value of 3.55 where the value also still shows that in general, the respondent stated that when he heard people criticize this brand, the respondent tried to defend it. The fourth indicator shows a mean value of 4.20, where the fan value also shows that in general, the respondent feels that when he hears people criticize this brand, the respondent will defend him.

Greenwashing

Descriptive statistics of greenwashing variables can be seen in Table 4.6 below:

Table 4.6
Greenwashing Descriptive Statistics

<i>Greenwashing</i>	N	Mean	Std. Deviation
The brand's claims about its concern for the environment are misleading.	120	1.99	0.93
The visualization of this brand in its advertisement stating that the bottle / gallon comes from recycled plastic is misleading	120	1.90	0.81

The brand's eco-friendly claims are unclear	120	2.37	0.91
Information about the brand's environmental concerns is not fully presented, so its environmentally friendly claims seem to be true.	120	2.55	0.95
Average value	120	2.20	0.90

Source: Data processed using SPSS (attached)

Based on the results of the descriptive statistics above, respondents' answers to the *greenwashing* variable above have a *mean* or average value of 2.20. Based on the value of the mean, it can be seen that almost all respondents feel that the brand is environmentally friendly and information about the brand's environmental concerns is presented in full. Based on the standard deviation value, it shows that respondents' answers to this indicator are quite variable.

This variable is composed of 4 indicators, where the first indicator has a *mean* value of 1.99. This value shows that in this indicator, the average respondent stated that the brand's claims about its concern for the environment are not misleading. The second indicator shows a mean value of 1.90. The average value shows that the visualization of this brand in its advertisement stating that the bottle/gallon comes from recycled plastic is not misleading. The third indicator shows a mean value of 2.37 where the value also still shows that in general respondents feel that the brand's environmentally friendly claims are quite clear. The fourth indicator shows a mean value of 2.58, where the value also shows that in general respondents feel that information about the brand's environmental concerns is presented in full and the environmentally friendly claims are correct.

Hypothesis Testing

After conducting *Goodness of Fit* testing, it can be seen that the model used in this study is feasible to proceed to the next stage, namely hypothesis testing. Testing the appropriate hypothesis for this study, namely with statistical methods using *Structural Equation Model* (SEM) analysis, (Sekaran & Bougie 2016) said that this method can predict changes in bound variables (dependents) that are associated with changes that occur in unbound (independent) variables. In this study, there are 8 (eight) hypotheses that refer to previous studies conducted by Leckie et al (2018). The fault tolerance limit is 5% ($\alpha = 0.05$) on the basis of decision-making as follows:

1. If the $p\text{-value} \leq 0.05$ then H_0 is rejected meaning, there is a significant influence of the two variables. The conclusions drawn, and the decision of the hypothesis is supported.
2. If the $p\text{-value} > 0.05$ then H_0 is accepted meaning, there is no significant influence of either variable. The conclusions drawn, the straightness of the hypothesis is rejected.

The following is a table of hypothesis test results:

Table 4.7
Hypothesis Testing Results 1 - 6

Hypothesis	Estimate	P-Value	Decision
H1: There is a positive influence of <i>Green perceived value</i> (GPV) on <i>Customer engagement behavior</i> (CEB).	0,704	0,000	H1 Supported
H2: There is a positive influence of <i>Altruistic value</i> (AV) on <i>Customer engagement behavior</i> (CEB).	0,091	0,045	H2 Supported
H3: There is a positive influence of <i>Customer engagement behavior</i> (CEB) on <i>Brand loyalty</i> (BL).	0,125	0,000	H3 Supported
H4: There is a positive influence of <i>Customer engagement behavior</i> (CEB) on <i>Customer Advocacy</i> (CA).	0,104	0,000	H5 Supported
H5: <i>Customer engagement behavior</i> (CEB) mediates the effect of <i>Green perceived value</i> (GPV) on <i>Brand loyalty</i> (BL).	4,334	0,000	H5 Supported
H6: <i>Customer engagement behavior</i> (CEB) mediates the influence of <i>Altruistic value</i> (AV) on <i>Brand loyalty</i> (BL).	2,121	0,017	H6 Supported

Source: Results of AMOS 21 data processing (attached)

Hypothesis 1

The first hypothesis tests the positive influence of *green perceived value* on *customer engagement behavior*. The sounds of the null hypothesis (Ho) and the alternative hypothesis (Ha) are as follows:

Ho: There is no positive influence of *green perceived value* (GPV) on *customer engagement behavior* (CEB).

Ha: There is a positive influence of *green perceived value* (GPV) on *customer engagement behavior* (CEB).

The results of the first hypothesis test show an estimated value of 0.704 p-values of $0.000 \geq 0.50$ which can be interpreted to mean that the *green perceived value* variable affects *supported customer engagement behavior* (Ho rejected). Therefore, it can be concluded that *green perceived value* has a positive influence on *customer engagement behavior*.

Hypothesis 2

The second hypothesis tests the positive influence of *altruistic value* on *customer engagement behavior* (CEB) The sound of the null hypothesis (Ho) and the alternative hypothesis (Ha) is as follows:

Ho: There is no positive *influence of altruistic value* (AV) on *customer engagement behavior* (CEB).

Ha: There is a positive influence of *altruistic value* (AV) on *customer engagement behavior* (CEB).

The results of the second hypothesis test show an estimated value of 0.01 p-value of 0.045 ≥ 0.50 which can be interpreted as an *altruistic value* (AV) variable positively affects *customer engagement behavior* (CEB).

Hypothesis 3

The third hypothesis tests the positive influence of *customer engagement behavior* on *brand loyalty* The sound of the null hypothesis (Ho) and the alternative hypothesis (Ha) is as follows:

Ho: there is no positive *influence of customer engagement behavior* (CEB) on *brand loyalty* (BL).

Ha: there is a positive influence of *customer engagement behavior* (CEB) on *brand loyalty* (BL).

The results of the third hypothesis test show an estimated value of 0.125 p-values of 0.000 ≥ 0.50 which can be interpreted to mean that the *customer engagement behavior* variable has a positive effect on *brand loyalty*. So it can be concluded that there is a positive influence of *Customer engagement behavior* (CEB) on *Brand loyalty*.

Hypothesis 4

The fourth hypothesis tests the positive influence of *customer engagement behavior* on *customer advocacy* The sound of the null hypothesis (Ho) and the alternative hypothesis (Ha) is as follows:

Ho: there is no positive influence of *customer engagement behavior* (CEB) on *customer advocacy* (CA).

Ha: there is a positive influence of *customer engagement behavior* (CEB) on *customer advocacy* (CA).

The results of the fourth hypothesis test show an estimated value of 0.104 p-values of 0.000 ≥ 0.50 which can be interpreted to mean that the variable has a positive influence on *customer engagement behavior* (CEB) and has a positive effect on *customer advocacy* (CA). It can be concluded that there is a positive influence of *customer engagement behavior* (CEB) on *customer advocacy* (CA).

Hypothesis 5

The fifth hypothesis tests *customer engagement behavior* mediating the influence of *green perceived value*. to *brand loyalty* The sound of the null hypothesis (Ho) and the alternative hypothesis (Ha) is as follows:

Ho: *Customer engagement behavior* (CEB) does not mediate the effect of *green perceived value* (GPV) on *brand loyalty* (BL).

Ha: *Customer engagement behavior* (CEB) mediates the effect of *green perceived value* (GPV) on *brand loyalty* (BL).

The results of the fifth hypothesis test show the amount of calculated t value of 4,334 > 1,658 which can be interpreted as a *customer engagement behavior* variable has a mediating role in influencing *green perceived value to brand loyalty*. This is further strengthened by seeing the sig value of 0.000 < 0.05, which means that there is an influence of *green perceived value on brand loyalty* mediated by *customer engagement behavior*.

Hypothesis 6

The sixth hypothesis tests *customer engagement behavior* mediating the influence of *altruistic value on brand loyalty* the sound of the null hypothesis (Ho) and the alternative hypothesis (Ha) is as follows:

Ho: *Customer engagement behavior* (CEB) does not mediate the effect of *altruistic value* (AV) on *brand loyalty* (BL).

Ha: *Customer engagement behavior* (CEB) mediates the influence of *altruistic value* (AV) on *brand loyalty* (BL).

The results of the sixth hypothesis test showed a calculated t value of 2.121 > 1.658 which can be interpreted to mean that the variable *customer engagement behavior* has a mediating role in influencing *altruistic value* against *brand loyalty*. This is further strengthened by looking at the sig value of 0.017 < 0.05 which means that there is an influence of *altruistic value on brand loyalty* mediated by *customer engagement behavior*.

Table 4.8
Hypothesis Testing Results 7

Hypothesis	Estimate	P-Value	Decision
H7: <i>Greenwashing</i> Low Group The Effect of <i>Green Perceived Value on Brand Loyalty</i>	0,873	0,000	H7 Supported
H7: <i>Greenwashing</i> Group High The Effect of <i>Green Perceived Value on Brand Loyalty</i>	0,648	0,000	H7 Supported

Source: AMOS 21 data processing results (attached)

Hypothesis 7

The intended hypothesis tests whether *greenwashing perception* moderates the influence of *green perceived value on brand loyalty* The sound of the null hypothesis (Ho) and the alternative hypothesis (Ha) are as follows:

Ho: *Greenwashing perception* does not moderate the effect of *green perceived value* (GPV) on *brand loyalty* (BL).

Ha: *Greenwashing perception* moderates the effect of *green perceived value* (GPV) on *brand loyalty* (BL).

Based on the table of the results of the seventh hypothesis test above, it is generally known that the magnitude of *the probability level* value is 0.008 < 0.05. This suggests that there is a difference between the two groups of low and *high greenwashing*. To see in detail the magnitude of the influence of *green perceived value on brand loyalty*, the *p-value* in the *low* and *high* groups of 0.000 < 0.05 respectively then the hypothesis is considered supported,

where *greenwashing* the group *Low* predominates more in influencing *green perceived value* against *brand loyalty*.

Table 4.9
Hypothesis Testing Results 8

Hypothesis	Estimate	P-Value	Decision
H8: Effect of <i>Low Group Greenwashing Altruistic Value</i> to Brand Loyalty	0,035	0,004	H8 supported
H8: <i>Greenwashing Group High Altruistic Value</i> to Brand Loyalty	0,085	0,165	

Source: AMOS 21 data processing results (attached)

Hypothesis 8

The eighth hypothesis tests whether *greenwashing perception* moderates the indirect influence of *altruistic value* on *brand loyalty*. The sounds of the null hypothesis (Ho) and the alternative hypothesis (Ha) are as follows:

Ho: *Greenwashing perception* does not moderate the influence of *altruistic value* (AV) on *brand loyalty* (BL).

Ha: *Greenwashing perception* moderates the influence of *altruistic value* (AV) on *brand loyalty* (BL).

Based on the table of the eighth hypothesis testing results, there is a difference in influence between the *high* and *low* groups, the magnitude of the influence of *altruistic value* on *brand loyalty* in the *low* group has a *p-value* of $0.004 < 0.05$. P there is a *high* group, the sig value becomes insignificant which is $0.165 > 0.05$, so overall the hypothesis is considered supported, where *greenwashing* moderates the influence of *altruistic value* on *brand loyalty*.

Discussion of Research Results

H1: There is a positive influence of *green perceived value* (GPV) on *customer engagement behavior*

The first hypothesis in this study tested the positive influence of *green perceived value* on *customer engagement behavior*. Based on the results of hypothesis 1 testing, it shows that *green perceived value* has a positive influence on *customer engagement behavior*. The results of this study show that the more consumers feel that this brand contributes to the environment by producing recycled packaging, feel that environmentally friendly brands have more benefits for the environment than other brands, and consumers feel that this brand is more environmentally friendly than other brands, consumers will say more positive things about this brand to others, and consumers will also encourage friends and relatives to buy and use eco-friendly brands. These results are also in line with the study (Leckie et al., 2018). that *green perceived value* significantly positively affects *customer engagement behavior*.

H2: There is a positive influence of *altruistic value* (AV) on *customer engagement behavior* (CEB)

The second hypothesis in this study tested the positive influence of *altruistic value* (AV) on *customer engagement behavior* (CEB). Based on the results of hypothesis 2 testing, it shows that *altruistic value* has a positive influence on *customer engagement behavior*. This means that the more consumers are aware that plastic waste harms many people in the world, consumers feel that the effect of plastic waste on public health is worse than we realize and environmental protection will help people have a better quality of life then consumers will say positive things about this brand to others, encourage friends and relatives to buy and use eco-friendly brands and will recommend eco-friendly brands to others, encourage friends and relatives to buy and use eco-friendly brands and will recommend eco-friendly brands to someone who asks him for advice. These results are also in line with research (Leckie et al., 2018), that *altruistic value* significantly positively affects *customer engagement behavior*.

H3: There is a positive influence of *customer engagement behavior* (CEB) on *brand loyalty*

The third hypothesis in this study examines the positive influence of *customer engagement behavior* (CEB) on *brand loyalty*. Based on the results of hypothesis 3 testing, shows that *customer engagement* has a positive influence on *brand loyalty*. This means that the more consumers say positive things about this brand to others, encourage friends and relatives to buy and use this brand and recommend this brand to someone who asks for advice, the more loyal consumers will be to environmentally friendly brands compared to other brands so that consumers will make the only brand to buy and will continue to produce environmentally friendly brands, Not another brand even if the eco-friendly brand is not available, it will delay its purchase. These results are also in line with research (Leckie et al., 2018), that *customer engagement behavior* significantly has a positive effect on *brand loyalty*.

H4: There is a positive influence of *customer engagement* (CEB) on *customer advocacy*

The fourth hypothesis in this study tested the positive influence of *customer engagement behavior* (CEB) on *customer advocacy*. Based on the results of hypothesis 4 testing, it shows that *customer engagement* has a positive influence on *customer advocacy*. This means that the more consumers feel part of and involved in an environmentally friendly brand such as saying positive things about this brand to others, encouraging friends and relatives to buy and use this brand, and recommending this brand to someone who asks for advice, the consumer will then the consumer will recommend this brand to their friends and family, Consumers will explain the positive aspects of this brand and if anyone criticizes the brand, consumers will also defend it and even consumers will also recommend their family and friends to use an environmentally friendly brand. These results are also in line with research Moliner-Tena (2019), that *customer engagement behavior* significantly affects *customer advocacy*.

H5: *Customer engagement behavior* (CEB) positively mediates the effect of *green perceived value* (GPV) on *brand loyalty* (BL)

The fifth hypothesis in this study examines *customer engagement behavior* (CEB) mediating the influence of *green perceived value* (GPV) on *brand loyalty* (BL). Based on the results of hypothesis 5 testing, shows the results that *customer engagement behavior* mediates the influence of *green perceived value* (GPV) on *brand loyalty* (BL). This means that the more consumers think that the brand contributes to the environment by producing recycled packaging, has more environmental benefits than other brands and consumers feel that this brand is more environmentally friendly than other brands, the more consumers will say positive

things about this brand to others, encouraging friends and relatives to buy and use this brand, recommend this brand to someone who asks him for advice. Furthermore, consumers will be more loyal by making the only brand to buy, consumers will still choose environmentally friendly brands, not other brands and even if this brand is not available, consumers will postpone their purchase. These results are also in line with research by Leckie et al (2018) that *customer engagement behavior* significantly mediates the influence of *green perceived value* on *brand loyalty*.

H6: *Customer engagement behavior* (CEB) positively mediates the influence of *altruistic value* (AV) on *brand loyalty* (BL)

The sixth hypothesis in this study examines *customer engagement behavior* (CEB) mediating the influence of *altruistic value* (GPV) on *brand loyalty* (BL). Based on the results of hypothesis 6 testing, shows the results that *customer engagement behavior* mediates the influence of *green perceived value* (GPV) on *brand loyalty* (BL). This means that the more consumers are aware that plastic waste is harming many people in the world, aware that the effects of plastic waste on public health are worse than we realize, and consumers are increasingly aware that environmental protection will help people have a better quality of life, the more consumers will say positive things about this brand to others, encouraging friends and relatives to buy and use the brand, recommending the brand to someone who asks them for advice. Then consumers will be more loyal by making the only brand to buy, consumers will still choose environmentally friendly brands, not other brands and even if this brand is not available, consumers will postpone their purchases. These results are also in line with research (Leckie et al., 2018), that *customer engagement behavior* significantly mediates the influence of *altruistic value* on *brand loyalty*.

H7: The effect of *green perceived value* (GPV) on *brand loyalty* (BL) moderated by *greenwashing perception*

The seventh hypothesis in this study tests *greenwashing perception* moderating the influence of *green perceived value* (GPV) on *brand loyalty* (BL). Based on the results of hypothesis 7 testing, it was found that both in the group of consumers who have a *greenwashing perception* of "low" and "high", consumers who think that a brand has contributed to the environment by producing recycled packaging and feel that the brand has many benefits for the environment, consumers will be more loyal to the brand. These results are also in line with research (Leckie et al., 2018), that *greenwashing perception* moderates the influence of *green-perceived value* on *brand loyalty*.

H8: The effect of *altruistic value* (GPV) on *brand loyalty* (BL) is moderated by *greenwashing perception*

The eighth hypothesis in this study examines *greenwashing perception* moderating the influence of *altruistic value* (AV) on *brand loyalty*. Based on the results of hypothesis 8 testing, it was found that in people with a "high" level of *greenwashing perception*, consumers' concern for others does not encourage them to be loyal to environmentally friendly brands. Meanwhile, consumers with a "low" level of *greenwashing perception* of consumers' concern for others encourage them to be loyal to environmentally friendly brands. These results are also in line with research (Leckie et al., 2018) that *greenwashing perception* moderates the influence of *altruistic value* on *brand loyalty*.

CONCLUSION

The conclusion is that *Green's perceived value* has a positive effect on *customer engagement behavior*. *Altruistic value* positively affects *customer engagement behavior*. *Customer engagement behavior* positively affects *brand loyalty*. *Customer engagement behavior* has a positive effect on *customer advocacy*. *Customer engagement behavior* mediates the influence of *green perceived value* on *brand loyalty*. *Customer engagement behavior* mediates the influence of *altruistic value* on *brand loyalty*. *Greenwashing perception* moderates the influence of *green perceived value* on *brand loyalty*. *Greenwashing perception* moderates the influence of *altruistic values* on *brand loyalty*.

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